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**SOME CONSIDERATION IN THE DEVELOPMENT
OF A PHYSICIANS' ASSISTANT PROGRAM IN
THE U. S. ARMY**

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Carlisle Barracks, Pennsylvania**

May 1971

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IN THE US ARMY

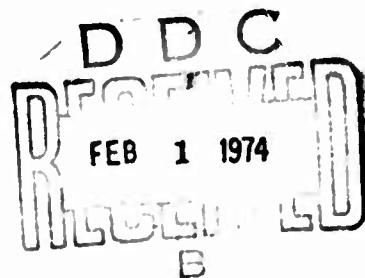
AN INDIVIDUAL RESEARCH REPORT

by

Colonel Dwight F. Morss, Jr.
Medical Corps "

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US Army War College
Carlisle Barracks, Pennsylvania
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ABSTRACT

AUTHOR: Dwight F. Morss, Jr., COL, MC
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Assistant Program in the US Army
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The purpose of this report is to examine some aspects of the national and the Army's need for and programs to develop a new type of health care delivery assistant--referred to generally as the physician's assistant. The Army's program is tentatively scheduled to begin in early 1972 with a class of 60 students. The projected title for the graduate of the Army program is 'Military Medical Associate (Physicians' Assistant)'--MOS not as yet determined. This report identifies certain problems in the utilization of the PA, and conclusions and recommendations are presented relative to these problems.

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CHAPTER I

INTRODUCTION

The US Army Medical Department plans to start its first class of students in the Physicians' Assistant Program about February 1972 if current obstacles are overcome. The purpose of this report is to examine the requirement for this new member of the health care delivery team from the national standpoint--and from the Army's vantage point, to discuss the background for the development of current and proposed programs; and to consider certain potential problems in the Army's utilization of the Physicians' Assistant. Finally conclusions and recommendations will be made with regard to the utilization in Army Medical Department.

In order to provide reasonable uniformity of descriptive terminology throughout the report, the letters "PA" for Physicians' Assistant or Physician's Assistant will be used whenever possible. Physician's Assistant is the proposed sub-title for the projected Army title of "Military Medical Associate," as will be discussed in Chapter III. "Physician's Assistant" is used descriptively in much of the background civilian literature. Occasionally, the related terms will appear such as "Clinical Associate", "MEDEX", "Surgeon's Assistant", and "Medical Services Associate". No generic term, has been adopted by the civilian programs at present.

DEFINITIONS

One definition which appears to apply to many of the programs currently in operation or being developed is quoted from Health Care Headlines in The Physician's Assistant--An Approach to Improved Patient Care:

The Physicians' Assistant is a new kind of health worker who handles routine, uncomplicated medical tasks which are time-consuming and do not require the physician's high degree of knowledge or skill.¹

Graduates of Duke University's Physician Assistant Program will perform duties which traditionally have been reserved for the physician, the technician, or the nurse as follows:

The physician's assistant is trained to perform responsibly and reliably certain defined skills. In the clinical setting, he learns to take patient histories, do physical examinations, start and regulate intravenous infusions, intubate the GI tract, do gastric lavages, biopsies, lumbar punctures, and other procedures classically performed by the doctor. He is trained to monitor vital signs, give medications, and keep progress records as classically performed by nurses. He is also taught to operate certain diagnostic and therapeutic instruments, such as electrocardiographs, respirators, cardiac monitors and delibullators, as well as to carry out extensive laboratory studies as commonly done by technicians.²

In every single program the specific skills to be learned may vary in number and depth of training. The emergency of an individual with a unique combination of skills to extend the capability of the physician to practice medicine and surgery is the common goal of programs, planned or in being. A further example of variations on the themes described were expressed by LTG Hal B. Jennings, Jr, The

Surgeon General of the Army in the most recent article on the Army's Physicians' Assistant Program, in Army Times, 3 February 1971:

. . . For example, they will be able to take medical histories, do routine physical exams, make plaster casts, draw blood, and do such tests as urinalysis and white blood cells counts.³

Underlying the utilization of physicians assistants (and personnel similarly trained but being described by different names) is the qualifying condition that they will be performing their functions under the supervision of a physician. As will be discussed subsequently, the physicians' assistant will be most effectively utilized in an environment where his performance of duty will allow the nurse to devote more time to the delivery of nursing care to patients, and the specialty technician (i.e., in the laboratory and radiology department) to concentrate on his primary specialty.

CHAPTER I

FOOTNOTES

1. Dorothy E. Mizgerd and Pamela J. Newton, "The Physicians Assistant--An Approach to Improved Patient Care" (Private Publication by Hospital Council of the National Capital Area, Inc., Washington, D.C., 1970), p. 18.

2. Ibid., p. 19.

3. George Marker, "Relief in Sight for Doctors," Army Times, (3 February 1971), p. 6.

CHAPTER II

THE NATIONAL NEED FOR PHYSICIAN'S ASSISTANTS

A growing shortage of physicians in the United States is contributing to an increasing compromise in the capability of the national health care system to perform its function satisfactorily. Two of the reasons for the numerical shortage include limitation on the numbers of students which can be accepted by medical schools (and thus graduate into the doctor pool) and the increasing demand for health care delivery to larger numbers of patients. Dr. Roger O. Egeberg, Assistant Secretary for Health and Scientific Affairs, HEW has stated that:

The shortage of manpower is now estimated at 50,000 doctors, 9,000 dentists, 145,000 nurses, and about 200,000 allied health workers. It seems that very little is being done to alleviate the shortage in any of these areas. A medical crisis of staggering proportions is rapidly catching up with the creaking facilities of the present day. The problem will not be solved by cutting back on health expenditures or ducking the solutions that are pressing for acceptance. 1

In addressing the problem of too few physicians, one must consider that other factors increase the severity of the shortage. Between 7500 and 8000 doctors are graduated from United States medical schools annually. Approximately 25% of these pursue careers which do not involve direct patient care. Only 203,000 of the 318,000 living American physicians' are actually treating patients. The remainder are in full-time research or teaching, in training programs, in administrative or executive posts or retired. 2 With the increasing trend toward specialization (i.e., in the major

specialities of medicine and surgery as compared with general practice) on the part of the young physician, as well as rising interest in sub-specialty career patterns, the movement of physicians to urban areas is producing a greater maldistribution doctor delivered services than in the past. Rural areas are losing their physicians to training programs and subsequent practice in the larger cities. The specialist (or subspecialist) is not interested in "solo" or even small clinic practice. Countless rural areas are without physician coverage for great distances. As a consequence, although it will be some time before the PA will legally be able to work in an unsupervised environment, the time will come when his ability to do so will have to be seriously considered and appropriate legislation passed.

The trend toward medical center practice and large or small clinic practice makes it vitally important that physicians remaining to cover large solo or two man practices be given assistance in their delivery of health care as soon in the future as possible. Another reason for physician migration to larger clinics is the frustration and often ineffectiveness of their practice of medicine caused by 60-80 hour weeks. The physical stress alone produces fatigue, error in judgment, and inability to keep abreast of the latest developments in medicine--in an era during which medical science and technology is rapidly expanding and advancing.

Paradoxically then, although this physician has more expertise and information to use in dealing with his patients, he has less time and is able to take care of fewer of them.

A major limitation on our ability to produce physicians in adequate numbers is the financial distress in which many medical schools currently find themselves. Forty-three out of 107 schools have received financial distress grants from the federal government-- mainly because of the multiplicity of health care programs which they are forced to support.^{3,4} Medical care, research and the education of allied health personnel have encroached on endowments as well as their operational funds to severely restrict any opportunity to increase medical school class size.

From the point of view of the medical schools the most important thing which is happening in medical education is the growing financial crisis of the medical schools themselves. At a time when the operating budgets of the medical school have reached record heights, there have probably never been so many medical schools in financial distress. . .⁵

Referring again to Carl M. Cobb's article, the cost (estimated at \$11,000 per student per year of which the average student pays only \$1,200 tuition and fees) of medical education is a difficult hurdle to leap. The balance for the student's medical education must be provided from other sources.⁶

The physical limitation of spaces for new medical students is illustrated by figures which show that prior to the 1969-70 class there was space for less than 10,000 new students each year. The 1969-70 class increased to 10,401 students. At the same time graduates increased by 308 but the total number was still only 8,364 (from 101 schools).

Cobb points out that even if medical school enrollment increases at a realistic rate of 10 percent, only 7,800 extra physicians could be expected to be added to the national pool by 1990.⁷ Considering the population growth rate, it does not seem likely that the physician shortage will improve through US medical school output at or near its current rate.

If US medical school output could be increased by doubling each class, a serious question arises as to the wisdom of such a maneuver. Dr. Marc J. Musser, Chief Medical Director of the Veterans Administration, pointed out at the 72d annual meeting of the American Hospital Association that:

To forecast manpower programs based on the existing chaotic patterns of usage is futile and can only lead to tremendous wasting of resources and to serious disruption of careers.

The number of health personnel needed, their distribution by categories, and even the content of their training will vary enormously depending upon the system that will be used for the delivery of services. . . . For example our present output of physicians may seriously exceed the need if maximum use is made of such labor saving devices as regionalization, group practice, health team methods or the physician's assistant. A few years ago the present high rate of unemployment among physical scientists, mathematicians and engineers would have been equally difficult to predict. The hazard of program forecasting is at an all time high, and the risks are especially great when we address ourselves to the long and expensive training programs that are required to produce physicians, dentists, nurses and certain highly skilled technologists.⁸

The above quotation most certainly provides food for thought and, although one's viewpoint may be different, it is clear that, from the standpoint of feasibility, increasing medical school enrollment at this time, or in the next several years, will not be possible--for the reasons previously discussed. Because there are too few

medical schools, which are too small, and because of the financial and operational restrictions placed upon them, it appears that a new kind of health assistant is one approach to solution (or at least lessening) of the problem. Nurses should be providing nursing, not physician-type care to patients--and the specialty technician should not be required to dilute his technical ability by being required to do "help the physician" tasks.

Participants in the AMA Conference on Physician Support Personnel, meeting in Chicago in March, 1970, felt generally that the requirement for a new kind of health assistant was valid and that it represented the only practical solution to the manpower shortage. Those attending the Conference identified the need for an individual whose skills would fall somewhere between those of a physician and a nurse. He would differ from a nurse in that his skills would be more technical or specialized--however, his responsibility generally would be greater than that of a technician. The physician would be invested with the ultimate responsibility for patient care performed by his assistant. 9

In reviewing the literature, it is evident that medical educators and many others concerned with health care delivery began to consider as early as 1965, the possibilities of developing a health assistant program. It has been felt that the kind of person best suited for training in such a program would be an individual already experienced in the health care field. In Chapter II we shall see the recruitment of medical corpsmen, who have been discharged from the service, as well civilian health personnel (i.e., those with practical nurse training) playing a major role in providing manpower for the programs.

CIVILIAN PROGRAMS

General

As a preface to the discussion of the civilian programs for the training of Physician's Assistants, it is worthwhile describing some of the main points which were emphasized at the 3d Annual Conference on Physicians Assistants held by Duke University on 12 and 13 November 1970. Although 100 or more operational or near operational PA programs are listed by HEW, only 10 to 12 are geared to produce the highly trained person with specific capabilities for broad based semi-independent medical judgment. Of these the programs at Duke University (Physicians Assistant) and at the University of Washington (Medex) are considered the most noteworthy (and will be discussed in detail). A question asked was what will happen to the physician's assistant should the shortage of physicians be eliminated. Other points were: studies of the economic impact of the use of PAs are nonexistent or isolated in nature and patient, as well as physician acceptance of the PA is not known. The conference further pointed out that a study (not identified) discouraged hopes that these highly trained PAs might be used to extend health services to poor inner-city and rural areas. Further, the duties and procedures this person may carry on under supervisions of a physician are ill-defined and training guidelines are debatable. The article describing this meeting went on to point out that an (unidentified) study indicated that persons in high economic brackets apparently wanted full-fledged physicians, whereas people in low income brackets would feel discriminated against by the use of a PA.

It must be reiterated that, with few exceptions, the PA (or PA-like) programs have had few graduates, are in the main, in the developmental stage, and are constantly being evaluated, readjusted and revised as the experience factor becomes more broad-based.

The concept of the PA is not new in view of the fact that the "division of labor" (to include responsibilities and functions) among the various types of health professionals has been endorsed by elements of the medical profession for centuries. As indicated in the previous chapter, Kadish and Long in their AMA article of 11 May 1970 point out that "perhaps the oldest type of physician's assistant functioning today is the Russian "feldsher"--a person described as being classified midway between physicians and auxiliaries. Their position is somewhat superior relative to the other members of the same general group of personnel (i.e., nurses, midwives, pharmacists and laboratory technicians). The "feldsher" (from the German word meaning field) works as an assistant to the physician in urban areas and as a primary-care physician in the feldsher-midwife (rural) stations. In rural areas his primary responsibility is for preventive medicine and environmental control. His training extends for 3½ years if he has completed eight years of secondary school and 2½ years if he has finished the full eleven years of secondary school. The "feldsher" is broadly trained in a Russian "middle-medical school" and is not specialized after graduation. He is urged subsequently and continually to broaden his education--
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opportunity is afforded to many to become physicians.

The authors discuss current programs (as of sometime prior to June 1970) indicating 20 were under development at 14 locations in 11 states--a contrast to the report described of 100 or more operational or near operational programs listed by HEW (published in November 1970). In concluding, Kadish and Long stated:

. . . .duties of the early programs pointed to the relatively unplanned and unstructured approach and illogical sequence of efforts displayed when the curriculum content and training methods were designed before the specific role and functions that the trainee would assume as a physicians' assistant were carefully determined. Within the past year, general agreement has emerged that this sequence of a program is proper

1. Operations research task analysis.
2. Classification of levels of professional knowledge and technical skill required.
3. Development of training requirements and curricular.
4. Development of faculty and training facilities.
5. Criteria for selection of trainees.
6. Pilot training phase (feasibility).
7. Evaluation and critique.
8. Modification12

I hope that the caveats outlined by these authors will produce careful technical approach to the expanding civilian programs for PAs and particularly to the proposed Army program.

Most of the literature refers to approximately 40 PA programs as being operational or in the planning stages (I have not gained access to HEW's list, previously referred to, of 100 or more such programs.) The chart which appears on the following page illustrates 14 of these programs and is modified (by the elimination of bibliography reference numbers in the original chart) to illustrate in a simple fashion the titles currently being used by programs of from 1 year to 3 years duration (with 2 exceptions).

CHART OF PROGRAMS

| <u>FACILITIES</u> | <u>PROGRAM</u> | <u>LENGTH OF TRAINING</u> |
|---|---------------------------------|-------------------------------|
| Duke University Medical Center | Physician Assistant | 2 years |
| University of Maine | Pediatric Nurse Associate | 4 months |
| Pacific Medical Center City College of San Francisco | Orthopaedic Assistant | 2 years |
| University of Colorado Medical Center | Nurse Practitioner | 4 months |
| University of Alabama | Surgeons Assistant | 2 years |
| Wake Forest University | Pediatric Assistant | 2 years |
| University of Washington | Medex | 1 year |
| Emory University | Anesthesia Assistant | 2 years |
| Grady Memorial Hospital | Medical Specialty Assistant | 2 years |
| University of Pittsburgh | Emergency Medical Technician | 1 year |
| University of Colorado | Child Health Associate | 3 years |
| University of Kentucky | Clinical Associate | 2 years |
| Cleveland Clinic Hospital Cuyahoga Community College | Clinical Corpsmen | 1 year |
| Brooklyn-Cumberland Medical Center and Long Island University | Medical Services | 2 years |

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The legal aspects of the PA's role have been understudy since the inception of the first programs. Legal difficulties were contemplated because of the licensing schemes for medical personnel. All states have enacted licensure laws to regulate the practice of medicine and these usually are phrased to authorize qualified physicians to perform all health care functions. The North Carolina Attorney General issued his advisory opinion in 1966 that the projected physician-supervised activities would not contravene the licensure laws of that state, and in the case of Duke's program, no difficulties have been encountered thus far.

Others have commented on the legal implications, as exemplified by a Wall Street Journal article which pointed out that the only legal point which is quite clear is that PA's cannot make final diagnosis, prescribe drugs, or perform major surgery.

Counsel for the American Medical Association has expressed the view that as long as the physician remains responsible for actions taken by those under his charge, he may employ and utilize any individual of his own choosing to assist him in patient care.

The National Academy of Licenses Ad Hoc Panel (1970) felt that legal authorization for PAs should not be affected through licensure, so that maximum flexibility for the optional use and full development of the PA's capabilities could be preserved. The possibility of instituting a system of registration was suggested (rather than licensure) to provide guarantees of the qualifications of personnel without imposing the rigid definitions characteristic of licensing legislation.

THE DUKE PROGRAM

In the early 1960's medical educators at Duke University became concerned about an unsuccessful attempt to set up a post-graduate education program for physicians.

When Dr. Eugene A. Stead, their Chairman of the Department of Medicine at Duke and founder of the Physician's Assistant Program analyzed the reasons for the failure, he discovered that practicing physicians had no time they could reasonably set aside for the purpose of education. Dr. Stead felt that perhaps ancillary personnel could be trained to competently assume many of the physicians tasks, thereby giving them more time.

Deliberations by the Duke medical staff led to the establishment of the first class of PAs and four ex-Navy medical corpsmen were chosen as the first students on 4 October 1965. Dr. William G. Anlyan, then Dean of Duke University appointed an ad hoc committee chaired by Dr. Stead to further explore the development of PAs including the types of projected roles, the educational background requirements, and the scope of their responsibilities and activities. On 7 February 1966 Dr. Stead read a preview of the program before the 62d Annual Congress of Medical Educators sponsored by the American Medical Association.

Continual review and evaluation of the program was made concomitantly with the small class in session. On 1 October 1967 Duke's first 3 students were graduated and were employed in the Medical Center to help in the evaluation of the program and to assist in supporting subsequent classes. Dr. Stead is now the Chief advisory consultant to the program and Dr. D. Robert Howard has been the first full-time director (appointed 1 October 1967).

Officials involved in the Duke program have recognized 3 main determining factors directly related to the ultimate success of their program: acceptance by the physician of the PAs competence, the patient's (and thus society's) acceptance of PAs and the PAs individual competence.¹⁹ These factors are obviously important in the consideration of any PA program and will have to be addressed by the Army Medical Department as it proceeds with its program.

As of June 1970, 29 PAs have been graduated from the Duke program, and it is projected that 40 will complete training in 1971; and an additional 60 in 1972. Entrance requirements include a high school diploma or its equivalent with courses in chemistry, algebra and biology; at least 3 years experience in the health field (such as corpsman or licensed practical nurse); I.Q. and psychological testing; satisfactory Scholastic Aptitude Test and College Entrance Examination Board results; and suitable character and personal evaluations. The basic curriculum is built around two levels of training and covers a period of two years. Level one (first 9 months) includes terminology and basic medical sciences, and level two (15 months) consists of clinical diagnostic and laboratory, as well as therapeutic, techniques.¹⁹

THE UNIVERSITY OF WASHINGTON PROGRAM

MEDEX, the University of Washington program, was designed in 1968 by Dr. Richard A. Smith of the School of Medicine to produce graduates to serve as PAs. Funds were made available through a Department of Health, Education and Welfare grant and a MEDEX

demonstration project got under way in May 1969. (MEDEX is derived from two French words--medecin extension--meaning a doctor's helper.)

Six Army, four Navy and four Air Force medics were selected from a group of 28 applicants. Medical performance and experience was stressed more strongly than education as prerequisite to acceptance. Those selected ranged in age from 22 to 55 years. At the time of this report 20 graduates have emerged from the fifteen-month cycle which includes three month's initial training at the medical school and a one year's assignment to a preceptor (a physician in general practice). During the year's experience with the general practitioner the MEDEX assists his mentor by learning and applying primary care skills
20
under close supervision.

The MEDEX program has appeared to be highly successful and has been well received by physicians and patients involved with its
21
graduates.

CHAPTER II

FOOTNOTES

1. Country's real health problem--interview with top presidential adviser US News & World Report, 68:69, 1970.
2. Carl M. Cobb, "Solving the Doctor Shortage," Saturday Review, (22 August 1970), p. 24.
3. "Plight of Medical Schools," Hospital Tribune (New York), (7 September 1970), p. 3.
4. "Medical School Crisis--Lack of Funds Seen Periling Whole System," Hospital Tribune (New York), (7 September 1970), p. 5.
5. "Medical Education in the United States," Journal of the American Medical Association, (23 November 1970), p. 1485.
6. Cobb, p. 25.
7. Ibid.,
8. "Foresight Urged in Medical Planning," US Medicine (Washington), (10 October 1970), p. 10.
9. SHN Zumbrum, PMP Trip Report, AMA International Conference on Physician Support Personnel, Palmer House, Chicago, Ill., 19 March 1970.
10. "Physician's Assistant Programs--At Present the Product Really Doesn't Exist," American Medical News, (30 November 1970), p. 11.
11. Joseph Kadish and James W. Long, "The Training of Physicians Assistants: Status and Issues," Journal of the American Medical Association, (11 May 1970), pp. 1047-1048.
12. Ibid., p. 1051.
13. Mizgerd and Newton, p. 3.
14. Bulletin of Duke University--Physicians Assistant Program 1970-1971, p. 7.
15. Dr. James, RX for MD's 'Many Physicians Hire 'Assistant Doctors' to Ease Burden," Wall Street Journal, (23 April 1970), pp. 175-77.

16. SHN Zumbum, RMP Trip Report.
17. "New Members of the Physician's Health Team--Physicians Assistants," NAS Ad Hoc Panel Report 1970, p. 7.
18. Bulletin of Duke University, pp. 1-3.
19. Ibid., pp. 2-6.
20. Betty Bransdorf, "Making Medics into MEDEX," Army Digest Vol. 26, (February 1971), p. 62.
21. "Patient and MD Acceptance of MEDEX Beyond Expected," Hospital Tribune (New York), (21 September 1970), p. 1.

CHAPTER III

THE ARMY'S NEED

During recent years, the Army Medical Department has been progressively plagued with increasing losses of career medical officers (physicians) by resignation or retirement. At the same time, paralleling civilian medicine's experience, physician interest (within the Medical Corps) has become more intensely motivated in the direction of specialty and subspecialty training and practice. The net result has been a trend to concentration of interest in practice in (if not assignment) the large teaching centers (Class II hospitals) and the large station-type hospitals (Class I hospitals). Medical Corps officers, particularly those entering specialty training or emerging from it, find their greatest professional reward in working in their own field of interest. This type of interest (though absolutely essential to the training of specialists) does not provide numerically enough general practice-oriented Army doctors to fulfill the needs of isolated and less specialty-oriented requirements such as exist for maneuver battalion medical sections and troop dispensaries. Medical Corps officers, either career or those serving their two-year military obligation, generally believe that their medical talent is not being fully exploited when they are called upon to serve as battalion surgeons (particularly in a non-combat area) or as troop dispensary doctors. Particularly, then, in these locations one sees a real need for an extension of the Army doctor's arm --to

relieve him of elements of his duties which could be handled by a Physicians' Assistant, so that his attention could be directed to aspects of his job which only he can perform--while simultaneously the high level of medical care could be maintained. Hopefully, fewer medical officers would be required to provide battalion surgeon type care and troop dispensary medical support. Such an assistant would be supervised by an Army doctor--but as more Physicians' Assistants are trained, fewer medical officers would be needed at these health care delivery sites.

The crowded outpatient clinics at virtually all Army hospitals are testimony to the necessity for additional health assistants. Much of good outpatient clinic management is dependent upon effective and timely screening of patients. Medical corpsmen help considerably in assisting the nurse and doctor to expedite clinic visits. However, there still remains a major gap between what the corpsman and the doctor can do professionally (i.e., diagnostically and therapeutically), and the same gap exists between nurse and doctor. In many instances, she is serving as the doctors' assistant (because he has no other) and she is unable to spend the time she would like in the delivery of primary nursing care.

LTG Hal B. Jennings, Jr, TSG, was quoted by George Marker in the latter's Army Times interview, dated 3 February 1971:

We can no longer call on nurses--already in short supply--to perform only as the doctors' assistants. Nurses should not be pulled away from their main responsibilities of providing patient nursing care. We had to find another pair of hands to assist the physicians. . . .

A well-trained, highly motivated health assistant is necessary -
to augment the Army's patient-care system.

THE ARMY'S PROGRAM

Serious consideration of a PA Program for the Army Medical Department began about two years ago and progressively staff sections of the Office of The Surgeon General began interchange of ideas and research and study of current and projected civilian programs. Inter-division memoranda and DFs were circulated for comment by professional consultants and administrative and executive members of the staff.

Finally, after much thought and discussion, it was decided that a PA program should be planned with classes initially to start at the Medical Field Service School, Fort Sam Houston, Texas, (MFSS) where, for years, the Army has provided medical training to many of its doctors, nurses and corpsmen.

I strongly emphasize that the following description and discussion concern a program for which plans are at this time still conceptual. Elements of the program have yet to receive approval from appropriate authorities (i.e., funding has not yet been established), and there are many hurdles to be overcome.

Discussion with LTC Henry A. Robinson, Jr., MC, USA, who is acting as the program's project officer at MFSS, has been most helpful in outlining the projected Army Program.

The Physicians' Assistant's formal military title will most probably be: Military Medical Associate (Physicians' Assistant), MOS not as yet determined. The placing of the apostrophe after the "s" in physicians is intended to convey the point that this individual will be used as an assistant to more than one doctor as necessary.

Assuming that the many hurdles are crossed, the lead time projected from completion of approval is estimated at 36 weeks. If all goes well, it is hoped that the first class will begin in February 1972. Classes of 120 students are planned, to be trained in 6-month increments of 60 each. Recruiting will begin this spring and will draw from top-flight enlisted men in the Army Medical Department with a minimum of 3 years of clinical experience. The experience will have been from duty assignments on hospital wards, in outpatient clinics, or in field medical duty. The candidates' primary MOS must be in patient care--therefore the MOS source will most appropriately be from 91B and 91C personnel:

Further prerequisites include:

1. High School graduate or equivalent.
2. GT score of 110 or above.
3. Sound working knowledge of written and spoken English.
4. US citizen.
5. Favorable recommendation for individual's Commanding Officer and from a Medical Corps Officer (preferably senior).
6. AFQT score in middle groups 1 or 2.
7. Physical qualification for warrant officer rank.

There is no age limit planned, and the projection indicates a range of from 21 to 46 years of age.

The training plan projected is for 72 weeks of training divided into 3 phases as follows:

Phase I (to be given at MFSS):

5 weeks of instruction to include military science, introduction to clinical medicine, basic mathematics, history, philosophy and ethics.

Phase II (to be given at MFSS):

43 weeks of instruction in medical science--by systems. Students will be broke out into small groups with one Medical Corps officer in charge of each group (probably consisting of 6 students). Written examinations will be given periodically throughout the course.

Phase III (to be given at an Army Class I hospital).

24 weeks of training to be supervised by a Medical Corps preceptor. During this phase the student will learn to work in the patient care areas and will become involved in the application of his previously learned skills to the actuality of health care delivery.

The plan includes the return of the student at the completion of Phase III to MFSS for graduation. At that time the rank of Warrant Officer-1 will be given to those graduates with enlisted grade of less than E8; Warrant Officer-2 to those in the grades of E8 or E9. Other possibilities for the timing of the Warrant Officer

designation are being discussed (for example, the possibility of awarding the rank prior to the student's entrance into Phase III). Exploration is continuing into the possibility of an award of academic credits by Baylor University to the graduates of the Army's PA program.

Utilization of the Army PA is currently projected for the following two areas of health care delivery:

1. In the Medical section of a maneuver battalion.
2. In troop medical clinic (dispensary).

No plans exist at present for the assignment of the Army PA to duties within a hospital setting.

CHAPTER III

FOOTNOTES

1. George Marker, "Relief in Sight for Doctors," Army Times,
(3 Feb 1971), p.6.
2. Henry A. Robinson, Jr, LTC, MC, USA, Personal Communication,
March 1971.

CHAPTER IV

POTENTIAL PROBLEMS IN THE UTILIZATION OF THE ARMY'S PHYSICIANS' ASSISTANT

PATIENT ACCEPTANCE

The national need and the Army's requirement for PAs has been described in previous chapters, but the acceptance of this new health assistant by his clientele (i.e., the patient) introduces a possible problem area into the Army's utilization program. Although most patients can readily identify types of complaints for which a diagnosis (and, in some cases, treatment) can logically be provided by health care personnel other than physicians, the PA will be dealing in levels of diagnostic complexity which traditionally have required physician attention early in the patient evaluation. For example, the average patient realizes, and agrees, that a minor burn, routine cold, simple headache, and even a minor skin problem can be dealt with by nurses or technicians--and do not object to having such problems examined and treated by personnel other than physicians. On the other hand, if the PA is indeed to augment the physicians' screening capacity, he will have to be trained for and become practically involved in diagnostic and patient evaluation techniques such as: (1) detailed history taking, (2) exploration of personal problem areas during patient interviews, (3) physical examination of the patient, and (4) performing surgical procedures such as the suturing of minor lacerations and applying plaster casts to sprains and (perhaps) fractures.

These, and other, functions will be carried out by the PA in a setting (at the outset) not remote from a physician. The history of medical practice has, over the years, produced many examples of health assistants (i.e., Navy medical corpsmen and Army Special Forces medics) performing tasks normally done by physicians in isolated situations. Patient acceptance of surgical repair of lacerations and treatment medically of acute and serious disease by lay personnel have not been condemned where a physician is physically not available. The PA, on the other hand, (civilian or Army) will be working--for the foreseeable future--either in the office of, or reasonably proximate to, his physician supervisor. One would suppose that the patient acceptance of a PA in these circumstances would be more difficult to obtain, since the physician is close at hand.

Civilian experience to date, as illustrated by the experience with Duke University's graduates, has been excellent and among the patient groups studied revealed no negative attitudes to the introduction of the PA. There was, however, a range of enthusiasm as regards acceptance, apparently correlated with the patient's understanding of the PA and his level of educational and/or income achievement. The group of patients with at least a college education regarded the PA as necessary and beneficial to the expanding health care delivery system. The higher income group appeared to feel that it was entitled to physician (rather than PA) care, but did not oppose the program. Patients with six years of education or less did not enthusiastically accept the PA and were suspicious that their group was being supplied with this kind of health care delivery because of their inability to pay.¹

Although the MEDEX program has only recently produced its first graduates, all indications point to acceptance by patients far beyond expectations.²

In general, monitors of the civilian programs have identified the requirement for a well-laid plan for public (as well as professional) education within the community, to include meetings with civic clubs, meetings with hospital boards, and liberal interchange of information with television, radio, and press representatives. Although time-consuming (and, in some areas, expensive), these activities are considered vital to the presentation of the PA program during its "growing years."³

While the very structure of the delivery of Army medical care is more arbitrary (in a sense) and therefore lacking in flexibility of choice much of the time, compared to civilian medicine, patient acceptance is virtually no less important, particularly in a period of the Army's intensive planning toward providing a volunteer force. At a time when Army careers must be made more attractive (with medical care a cornerstone of such incentive), the education of the Army's actual and potential patients with regard to the role of the PA presents a major challenge. Success in achieving patient acceptance will depend not only on an adequate understanding by the patient, but also the interest, understanding, and active explanation and support by US Army unit commanders and staff at all levels. The entire team must realize the necessity for and the importance of the PA in the Army health care delivery system.

PHYSICIAN ACCEPTANCE

Many physicians were surprized when the American Medical Association approved and encouraged development of the concept of the PA program in view of the relatively short period of time the physician has enjoyed the status of a professional. The American Medical Association and the Association of American Medical Colleges has diligently labored to improve the image of the American physician, who as late as 1900, was the product of an inadequate apprentice system. Many medical schools were forced to close following the Flexner report in 1910 and, at that point, less than 10 percent of practicing American physicians were graduates of medical schools.⁴ That a person with less than medical school (and internship training, as a minimum) credentials should be allowed to attend patients, even on behalf of a physician, presents to some real possibilities for problem development in the physician-acceptance area.

Civilian evaluation of this facet of the PA utilization impact has been remarkably encouraging, however. Considering the limited experience with PA program graduates to date, most of the sentiment regarding acceptance must be interpolated from reported reactions by doctors to the idea--indirectly therefor, from transactions at meetings where the topic was discussed. Further, those physicians who are using the product are obviously pleased with at least the concept, and, presumably, the fact of the PA's existence. Perhaps the apparent trend to more physician support and enthusiasm is related to the fact that many doctors believe that there are no other solutions

in sight. Parenthetically, it is interesting to note that the nursing profession has been somewhat less enthusiastic than the physicians to welcome the PA to the team. This relative reluctance appears to be related to the nurse's objection (generally expressed by organizations rather than individuals) to taking orders from the PA rather than the physician. Indications are that the nurses' reaction to the program is improving.⁵

Additional information reported in the Bulletin of the American College of Physicians (members are mainly specialists in internal medicine) in November 1970 derives from a survey of physicians attitudes in a survey from Wisconsin on the subject "The Doctor's Assistant" (evaluated in July 1969):

Thirty-two percent of physicians responded. Of these 61 percent believed assistants were needed, but only 42 percent said they would use them in practice. Internists responded to permissive areas of activity as follows: 57 percent thought it satisfactory to do at least part of the history; only 15 percent felt any part of the physical examination should be done; 25 percent thought such assistants should make house calls. These percentages make one wonder how many physicians have studied their own activities.

It is well known that most internists feel the hallmark of a good internist is a thorough history. Probably those answering really didn't feel they were relinquishing any significant part of the history. Conversely, the reluctance to permit assistants to do the physical examination is not borne out by experiences of a number of clinics and centers where nurses have been trained to do thorough and satisfactory physical examinations requiring little or no backup from physicians except for abnormal findings. Finally, the reluctance to let these people do house calls is rather interesting, in view of the general reluctance or inability of physicians to make house calls themselves.⁶

The preceding observations raise the question of the perspective in which the physician sees the PA--whether civilian or military (Army).

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The implication can be made that the physicians surveyed regarded the PA almost exclusively as a technician. It would seem that a major problem for any physician would be the delegation (and segregation) of elements of the history taking and physical examination to the PA with respect to redundancy and exclusion of omission--that is to say, the identification of what elements of these procedures must be at least questioned, and perhaps repeated, in order to assure accuracy, completeness, and reasonable and valid interpretation. Herein lies the problem of how much can a PA perform in lieu of the same (or repeated) function performed by the physician. The answer may be that the PA is taught to be a data gatherer, subject to varying degrees in each case, to review and corroboration by his physician supervisor. Thus emerges the importance of not only physician acceptance of his PA, but physician willingness to develop appropriate techniques for evaluation of data his PA provides within a time framework which maximizes the usefulness of his assistant in their general practice of medicine.

CAREER MOBILITY

The enthusiasm with which potential candidates have greeted the current civilian and proposed civilian and Army PA programs attests to the existence of significant numbers of likely candidates for training as a new type of health care assistant. Recruitment for the Duke University program has continually resulted in many times more qualified candidates than could be accepted. Duke's applicants have been uniformly hungry for an opportunity to contribute and to be provided a

a living wage for their contribution.⁷ Although recruiting for the Army program is still in the planning stages, the outlook is extremely favorable. Presuming, and I believe with good reason, that high quality candidates for the Army PA program will be available in more than adequate numbers, the question of career mobility presents as a reasonable reg in looking to the future.

The currently available literature describing civilian programs does not specifically address this problem--but as time permits broader observation, the PA, civilian or Army, will be forced to consider future goals and levels of professional attainment. I can foresee that the PA will ask himself: "Now that I've been a PA for 5 years, what professional level will be available to me 5 years from now or 10 years from now?" As a civilian PA, this responsible professional individual will be increasing his expertise and practical capability as a linear function of the time he spends as a PA--his value to his physician employer or monitor most surely will increase over the years. Can he therefor anticipate, as a civilian, more pay, a change in title, and/or other improvements in his status? As a warrant officer in the Army, will his highest level of rank expectation be that of top warrant officer grade? It is difficult to project answers to this question for the Army graduate--with the program still on the "drawing board"--and, the limited civilian experience does not offer the Army planner much in the way of guidance. However, the problem must be identified early in the planning phase of the program and the feasibility of alternative rank structure and/or further incentives (beyond WO grade) must be addressed.

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Although the possibility of an enlisted man attaining entrance to medical school cannot be reasonably contemplated in view of his lack of a college degree (as currently appears to be the case for the Army's PA graduates), this incentive could be developed as the program proceeded. The graduates of the initial classes will hopefully be the recipients of partial college credits (described in Chapter III), and a program for augmentation of these credits to meet medical school admission requirements is worthy of study. A potential obstacle to such an incentive program is the age of the students initially involved (21 to 46 years).

The incorporation of a "physician-trainee" program in the Army's plan for the future could very well provide an appropriate incentive (beyond those currently projected) in the career mobility area. Described by Colonel Bedford H. Berrey, MC, and Colonel Harry DeWitt, Jr., MSC, in the February 1971 issue of Medical Opinion and Review, this program would be directed toward recruitment of the student who is a potential physician. The authors suggest that individuals selected for this type of training would have to be qualified as potential physicians, and that, similar to work-study arrangements already proven successful in the training of engineers, their training would include education at school and on the job. The essence of this program includes arranging for the trainee to study briefly in the medical school environment, and to apply his skills in paid employment under the supervision of a physician for a prescribed follow-on period. The physician-trainee would alternate between medical school and on-job training with the potential accrued advantages as follows:

(1) the cost of his medical education would be somewhat relieved by the salary he would receive during the work phase; (2) his decision to make a major investment in medical education would be reduced to a series of smaller decisions, each becoming easier to make; and (3) it is reasonable to predict that the trainee would acquire a high level of skill in some areas where physicians do not normally develop expertise (i.e., administering first aid, cleaning and dressing wounds, preventive medical measures, and care of the feet).⁸ The inclusion of the physician-trainee program in the further expansion of the Army's PA training plans may very well be an important incentive to recruitment and retention.

Finally, the possibility of delayed placement (but confirmed acceptance) in future years for potential physician-trainees is being explored by the Office of the Surgeon General. This requires an unusual commitment by any medical school administration which agrees to accept, for example, a college graduate of the year 1972 for confirmed admission in 1974. The attractiveness of such a program has obvious advantage; the ability of the medical schools to so act will have to be evaluated.

CHAPTER IV

FOOTNOTES

1. "Physician's Assistant Program--1970-1971," Bulletin of Duke University, (March 1970), p. 8.

2. "Patient and MD Acceptance of MEDEX Beyond Expected," Hospital Tribune (New York), Vol. 4, 21 September 1970, p. 1.

3. "The Physician's Assistant Program," Congressional Record--Extension of Remarks (by Harvey E. Estes, Jr., MD, and D. Robert Howard, MD) (Washington, D.C., 26 June 1970), p. E5955.

4. Bedford H. Berrey and Harry W. DeWitt, Jr., "Earning the MD Step by Step," Medical Opinion and Review, Vol. 7, No. 2 (February 1970), p. 41.

5. "The Physician's Assistant Program," p. E5954.

6. The Bulletin of the American College of Physicians, Vol. II, No. 11 (November 1970), p. 545.

7. "The Physician's Assistant Program," p. E5954.

8. Berrey and DeWitt, pp. 41-42.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

.. This research report has not attempted to address the entire
.. experience of the development of either the civilian or the Army's
PA programs. Rather, attention has been drawn to highlights in the
development and planning in some currently operational programs in
the civilian sector and the prediction of several problem areas in
the Army's projected course of action to produce PAs.

CONCLUSIONS

Examination of the progress of a number of PA programs initiated
by civilian medicine indicates that, despite certain described pit-
falls and projected question-marks, limited experience to date suggests
that this new type of health assistant is needed on a nationwide
basis, and, with increasing numbers, should indeed extend the ability
of the physician to more adequately deliver health care. The require-
ment for the PA is particularly reinforced by the urgency for a solu-
tion to physician shortage and maldistribution, compounded by the long
lead-time and constrained facility and personnel capabilities of the
existent US medical school system.

The US Army Medical Department has recognized a requirement for
a PA, and plans to recruit candidates during the remainder of 1971 for
admission to a 72-week course of training, hopefully to begin in early
1972. The projected course of training appears to be designed appro-
priately with regard to the Army's planned initial use of its graduates

in duty assignments in the medical section of maneuver battalions and in troop dispensaries.

Certain problems relating to utilization of the Army PA have been described: patient acceptance of this individual, physician acceptance of him, and the question of career mobility for the immediate and long-range future. These problems will present a challenge to the Army Medical Department's entire health care delivery system.

RECOMMENDATIONS

Based upon the conclusions presented in this report, the following recommendations are made:

1. That continuous monitoring of on-going and planned civilian PA programs be carried out in order that the final curriculum design and initial implementation of the Army's program at the Medical Field Service School incorporate the "best of both worlds" (civilian and Army) in educational and training application.
2. That the entire staff of each Class I hospital involved in Phase III of the PA program be carefully orientated so that maximum benefit can be derived by both student and staff.
3. That information concerning the necessity of and desirability for the PA be widely disseminated to all recipients (actual and potential) of Army health care, as well as to personnel responsible for the delivery of medical care. This should be accomplished by briefings, talks at appropriate meetings and Army community programs, and by clearly written brochures and information letters.

4. That Army physicians be urged to utilize the PA in a role appropriate to the latter's training as well as to his relationship with other members of the health care delivery staff.

5. That further study of the extension of the PA's role be carried out with specific regard to utilization in more isolated settings than currently planned.

6. That the possibility of future extension of the scope of the PA program to include a "physician trainee" opportunity for career mobility be investigated.

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